



U.S. Department  
of Transportation

**Federal Highway  
Administration**

# Memorandum

Subject: **INFORMATION:** Results of the 1996  
Performance Agreement on the Protection  
of Wetlands and Water Quality

From: Rodney E. Slater *RES*  
Administrator

To: Regional Administrators  
Federal Lands Highway Program Administrator

Date: November 13, 1996

Reply to  
Attn. of: HEP-40

One of the Goals of our 1996 Performance Agreement was to "actively enhance our environment through wise transportation decisions." A measure of meeting this goal was to achieve "no-net-loss" status of wetlands in all FHWA regions, through which mitigation would provide equal or greater compensation for unavoidable wetlands impacts due to Federal-aid highway projects.

We are proud to report that all FHWA regions achieved this goal, and that Federal-aid highway projects provided compensatory mitigation for wetlands impacts over and above avoidance and minimization at a nationwide ratio of greater than 2:1. This indicates a strong commitment to working with natural resource management and regulatory agencies to provide quality transportation planning and an ecologically productive and healthy environment. Attached is a report on the no-net-loss performance measure showing the relative loss/gain balances for each region. The report also lists "milestone" accomplishments in ~~meeting our objective of establishing~~ at least one wetland mitigation bank, interagency wetland conservation program, or water quality action plan in every region.

Congratulations to all of you and your counterparts at the State highway agencies in accomplishing the no-net-loss measure and the supporting milestones. Your performance demonstrates that, as an Agency, the FHWA is meeting our obligations within the Federal-aid highway program to help reduce the national trend of wetland losses and to protect water quality.

It is essential that we continue to emphasize environmental considerations in highway planning, design, and construction. Policy initiatives have allowed greater flexibility in use of Federal-aid funds for establishment of wetland mitigation. This is reflected in the recent revision of the FHWA's wetland mitigation regulation,

23 CFR 777. Many State and Federal Agencies have established new programs to improve our environment and restore natural resources. These will offer new opportunities for cooperation and partnership, and better ways to conserve our critical natural resources. We at the FHWA must continue our emphasis on natural resource considerations in planning, construction, and use of highways to ensure that we make the most of every opportunity to protect and enhance our natural ecosystems as well as improving our socio-economic environment.

Attachment

, FHWA:HEP-40:FBank:nb:x65004:10/26/96

Revised:10/30/96

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cc: HOA-1, HOA-2, HOA-3, HOA-ES,  
HPD-1, HEP-1, HEP-40, AQPT, NT,  
AQTT, NCRT, HEP-30, PDT, EPT,  
NCRT(FBank), NCRT(2Files)

**ACCOMPLISHMENTS IN SUPPORT OF FY 1996  
FEDERAL HIGHWAY ADMINISTRATION  
PERFORMANCE AGREEMENT**

**GOAL 5: Actively enhance our environment through wise transportation decisions.**

**PERFORMANCE MEASURE:** The FHWA is committed to the achievement of the following in support of this goal:

**"No-net-loss" of wetlands in conjunction with highway projects on a region-by-region basis as measured by the percent of wetlands acreage affected by highway projects maintained, acreage of wetlands affected by highway projects, and acreage of wetlands affected by highway projects preserved or replaced.**

**ACCOMPLISHMENT:**

Documenting the completion of this Performance Measure required information from FHWA field offices that would allow a comparison of wetland impacts with wetland mitigation efforts. Considering the time constraints of this effort, we determined the simplest and most direct way to gather the information would be strictly on a straight acreage basis; that is, performance would be measured program-wide by comparing the total acres of wetland impacted by highway projects in the regions to the acres of wetland provided as mitigation. The ratio of total acres impacted to acres mitigated would indicate Agency success on meeting the no-net-loss measure . . . greater than or equal to 1:1 would accomplish the measure and less than 1:1 would not. We recognized, however, that these results would indicate only nationwide acreage of impacts and mitigation installed over a very short period of time. Few conclusions would be possible concerning replacement of wetland functions and values, long-term mitigation success, ecological effectiveness, and other similar indicators which would be required for a thorough assessment of sustained no-net-loss performance. We, therefore, recommend that information presented here be used with the caution that further and continuing assessment would be necessary to substantiate the status of our no-net-loss performance.

With these limitations in mind, we nevertheless believe the survey of the regions provided a valuable snapshot of the performance of the Federal-aid highway program in achieving the no-net-loss goal. **The overall results indicated that the no-net-loss performance measure was met on an acreage basis for the time frame sampled. On average, the figures indicate that Federal-aid highway projects provided 2.3 acres of wetland mitigation for each acre of impact. (Figure, page 2)**

The results may provide insight into the magnitude of the Federal-aid highway program's contribution to overall nationwide wetland impacts and mitigation. Recent estimates of total wetland loss indicate that, between 1982 and 1992, approximately 160,000 acres of wetlands per year were still being converted to other land cover types by all sources of impacts. Also, during that period, approximately 75,000 acres of wetlands per year were being restored or created. Subsequent to 1992, an additional 68,000 acres per year of wetlands have been restored or established as the result of the Wetlands Reserve and other new wetland conservation programs, resulting in a current net loss estimate of approximately 25,000 acres

per year nationwide. These figures are based on our interpretation of information available from the U.S. Fish and Wildlife Service (FWS) National Wetlands Inventory and U.S. Department of Agriculture (USDA) National Resource Inventory. Our sampling indicated that while impacts from the Federal-aid highway program would account for slightly over 2,000 acres per year, they still represent a relatively small percentage of the total wetland loss/gain rate.

The following table provides the acreage figures provided by each Region in response to a memorandum\* sent to the field in May:

<b>FHWA REGION</b>	<b>Wetland acres impacted By Federal-aid highway projects completed between 10/1/95 and 8/1/96</b>	<b>Wetland acres provided as mitigation on Federal-aid highway projects completed between 10/1/95 and 8/1/96</b>
<b>1</b>	<b>57</b>	<b>201</b>
<b>3</b>	<b>279</b>	<b>573</b>
<b>4</b>	<b>372</b>	<b>1,347</b>
<b>5</b>	<b>235</b>	<b>427</b>
<b>6</b>	<b>152</b>	<b>366</b>
<b>7</b>	<b>142</b>	<b>188</b>
<b>8</b>	<b>232</b>	<b>325</b>
<b>9</b>	<b>0</b>	<b>0</b>
<b>10</b>	<b>99</b>	<b>127</b>
<b>Totals</b>	<b>1,568</b>	<b>3,554</b>

\* The memorandum signed by Kevin Heanue on May 31, 1996 asked each region to supply the acreage of wetlands impacted and mitigated on projects completed since October 1, 1995. Based on the date requested in the memorandum for return of the information, we assumed data were provided for projects completed up until August 1. This resulted in a 10-month window of performance information. These data reflect impacts primarily due to individually permitted highway projects, and might not incorporate losses caused by projects completed under nationwide permits.

The survey also indicates that our mitigation replacement ratio represents about 3 percent of the estimated total nationwide wetland replacement rate, most of which comes from restoration of agricultural lands. Replacement areas might include wetland banks in which credits are being held for future projects, and do not necessarily represent an actual long-term or permanent gain in the loss-gain balance.

It should be kept in mind that highways are only a small percent of the total societal infrastructure, and to separate out wetlands impacts due only to highway construction might be misleading in determining the real role of transportation development in contributing to loss (or gain) of wetlands in the United States. This is particularly true in the period from 1982-1992, when the wetland loss rate due to urban expansion accounted for 57 percent (89,000 acres per year) of the gross annual loss rate.

Considering the mitigation ratio indicated by our survey, we would argue that this positive replacement rate is due in large part to the project eligibility and funding provisions for

The Healy wetland banking site is currently in design. Final plans call for the creation of 20 acres in New Castle County, as well as, the enhancement of an additional 150 acres in conjunction with the adjacent DDNR site. In addition, another possible site has been identified in Sussex County. This site is the northern part of the Great Cyprus Swamp that had been previously drained. It may be restored in conjunction with the Delaware Wildlands Corporation, a non-profit conservation organization in Delaware.

The COE (Norfolk District) and the Virginia DOT have drafted separate wetland banking guidelines, but the proposals have many differences. The FHWA Division Office in Richmond reports that reconciliation appears possible, so there may be additional banking progress to report in the Region in the future.

On December 21, 1995, the Pennsylvania Department of Transportation (PennDOT) signed an Advance Wetland Compensation Agreement, providing for creation of advance compensation wetland banks within PennDOT District 9-0 (a six-county area in southern west-central Pennsylvania). The agreement was also signed by the Pennsylvania FHWA Division Office, the Pennsylvania Department of Environmental Protection and the COE (Pittsburgh and Baltimore Districts). The agreement provides for creation of wetland banks to compensate for minor wetland impacts due to roadway construction and maintenance activities within the six defined sub-basins of the Susquehanna River drainage within the District. Final design has been initiated on two banks to date. Both of these sites will be developed on or adjacent to Pennsylvania State Gamelands. Design is being performed in cooperation with the Pennsylvania Game Commission and the FWS. The cooperation of all parties in this process should assure high probability of success, while fostering increased cooperation among the participating parties and reducing costs. Design and construction expertise will be provided by the FWS and the COE. Most proposed sites are on State-owned lands or lands which are adjacent to State lands.

#### **Region 4:**

The South Carolina Department of Transportation (SCDOT) agreed to purchase 9,100 acres of pristine Sandy Island in coastal Horry County for use in mitigation of future transportation projects in the State. This island is considered to be one of the most important ecological sites on the east coast. The island will serve as a wetland mitigation bank which will also include 7,700 acres in adjoining tracts. Permit and resource agencies worked very closely with the FHWA and the SCDOT in a true partnering effort aimed at meeting multiple agency objectives. Others involved include the COE, EPA, FWA, NMFS, the South Carolina Department of Health and Environmental Control, the South Carolina Office of Ocean and Coastal Resource Management and private partners, including the South Carolina Coastal Conservation League, The Nature Conservancy, The Trust for Public Land, and the Winyah Bay Task Force.

The North Carolina Department of Transportation (NCDOT) has seven wetland mitigation banks underway. Eight more are being planned for implementation in 1996. An innovative wetland mitigation program is being undertaken by the North Carolina Department of Environment, Health, and Natural Resources (DEHNR) to identify potential wetland mitigation sites in all the major river basins of the State. Applicants (State, Federal, or private) can pay a fee to DEHNR rather than conducting compensatory mitigation on their own. The program

**Region 9:**

Two new wetland mitigation banks are under development in Region 9: the Carmel River Mitigation Bank in Monterey County, California and the expansion of the Washoe Lake Wetland Bank in Washoe County, Nevada. Habitat features are currently being established at both bank sites and the multi-agency banking agreement for the Carmel River Bank is being finalized.

**Region 10:**

Washington and Idaho have completed wetland banking agreements with their respective resource/regulatory agencies. Both States are currently coordinating with these agencies to establish specific geographic bank sites for project mitigation. Oregon is currently developing a banking agreement in coordination with the Division of State Lands which regulates the State's wetland banking program.

Washington State's water quality action plan is already in effect and they are working in cooperation with the State Department of Ecology, which is their permitting agency. Idaho Transportation Department and the FHWA Idaho Division have written a joint preliminary water quality action plan.

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